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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 October 2009*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *27-40 and 42-52* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *27-40 and 42-52* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All   b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
　　　　　application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date *12OCT2009*.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application.

6)☐ Other: _____.

DETAILED ACTION

1.   This Action is in response to Applicant's amendment filed on 12OCT2009. **Claims 27-40**

and 42-52 are now pending in the present application. **This Action is made FINAL.**

2.   **Claim 41** has been canceled by Applicant.

Information Disclosure Statement

3.   The information disclosure statement submitted on 12OCT2009 has been considered by the

Examiner and made of record in the application.

Claim Rejections - 35 USC § 101

4.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any
> new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of
> this title.

        Claims 27-52 are rejected under 35 U.S.C. 101 because the claimed invention is directed to

non-statutory subject matter. **Claims 28-36, 39-40 and 42-52, and 41** are rejected by virtue of their

dependency on **claims 27, 37, and 38** respectively.

        Applicant's specification states: (page 20 lines 17-21) **The units** 132, 134, 136 and 138 **of**

the memory manager 120 may be provided as **software**, hardware or a combination thereof. The

units 132 to 138 may be implemented together in the memory manager 130. Alternatively, a

distributed implementation is also possible with some of the units provided elsewhere in the

communications unit and/or state handler (with similar statements regarding implementation in software appearing throughout the specification).

Claims 27-36 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps or acts to be performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to particular machine, or (2) transform underlying subject matter (such as an article or material) to a different state or thing. See page 10 of In Re Bilski 88 USPQ2d 1385. The claims are neither positively tied to a particular machine that accomplishes the claimed method steps nor transform underlying subject matter, and therefore do not qualify as a statutory process. The method of managing a state memory including defining, dividing, and allocating is broad enough that the claim could be completely performed mentally, verbally or without a machine nor is any transformation apparent.

Claim 37 states: A **unit for managing** a state memory adapted for storing state information applicable in a message communication between communications units in a communications system, characterized by: **means for defining** at least two message classes of the messages communicated between said communications units; and **means for dividing** said state memory into at least two memory portions, each memory portion being assigned for storing state information associated with a specific message class; and in that said defining means is configured for defining said at least two message classes based on at least one of: a priority type of said communications messages; an application protocol used when generating said communications messages; and a session type associated with communications messages.

Claim 38 states: A **communications unit** adapted for message communication with at least one external communications unit in a communications system, said communications unit comprising: a state memory adapted for storing state information applicable in said message

communication; and a **state memory managing unit,** characterized in that said state memory

managing unit comprises: **means for defining** at least two message classes of the messages

communicated between said communications unit and said at least one external communications

unit; and **means for dividing** said state memory into at least two memory portions, each memory

portion being assigned for storing state information associated with a specific message class; and in

that said defining means is configured for defining said at least two message classes based on at least

one of: a priority type of said communications messages; an application protocol used when

generating said communications messages; and a session type associated with communications

messages.

Applicant attempts to claim non-statutory subject matter (i.e. software). Applicant fails to

claim a proper computer readable medium and thus fails to fall within in a statutory category and is

thus, per se, considered software.

See Response to Arguments for further details.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section
> 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the
> subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary
> skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

6.   The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966),

that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a)

are summarized as follows:

      1.   Determining the scope and contents of the prior art.
      2.   Ascertaining the differences between the prior art and the claims at issue.
      3.   Resolving the level of ordinary skill in the pertinent art.
      4.   Considering objective evidence present in the application indicating obviousness or
              nonobviousness.

7.   This application currently names joint inventors. In considering patentability of the claims

under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was

commonly owned at the time any inventions covered therein were made absent any evidence to the

contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and

invention dates of each claim that was not commonly owned at the time a later invention was made

in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35

U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8.   **Claims 27, 28, 31-35, 37-40, 44, 47-51** are rejected under 35 U.S.C. 103(a) as being

unpatentable over **Williams et al. (US Patent # 6,144,669)** in view of **Nakatsugawa (US Patent

US 6,243,830 B1).**

      a) Consider **claim 27,** Williams et al. clearly show and disclose, a method of managing a state

memory adapted for storing state information applicable in a message communication between

communications units in a communications system, comprising the steps of: defining at least two

message classes of the messages communicated between said communications units (abstract,

column 2 lines 20-36); and dividing said memory into at least two memory portions, each memory

portion being assigned for storing state information associated with a specific message class

(abstract, column 2 lines 37-57). However, Williams et al. does not specifically disclose that said state

memory is arranged in a first communication unit and is allocated for storing state information used

in message communication with a second communications unit; and in that said second

communications unit requesting said first communications unit to allocate state memory space

utilized for storing said state information used in said message communication with said second

communications unit.

Nakatsugawa shows and discloses a state information managing method which is able to

manage easily state information of respective communication units, wherein said state memory is

arranged in a first communication unit and is allocated for storing state information used in message

communication with a second communications unit (abstract, column 2 lines 20-34); and in that said

second communications unit requesting said first communications unit to allocate state memory

space utilized for storing said state information used in said message communication with said

second communications unit (abstract, column 2 lines 20-34 lines 53-67).

One of ordinary skill in the art at the time the invention was made would have been

motivated to combine the teachings of Nakatsugawa and Williams et al. since both concern

managing messaging in a communication network and as such, both are with in the same

environment.

Therefore, it would have been obvious to one of ordinary skill in the art that the time the

invention was made to incorporate a state memory manager and allocating state memory for storing

state information, as taught by, Nakatsugawa into the system of Williams et al. for the purpose of

reducing communication traffic volume required for state management (Nakatsugawa; column 1

lines 7-14), thereby reducing the amount of resources required for state management.

b) Consider **claim 28,** and **as applied to claim 27 above,** Williams et al. as modified by

Nakatsugawa clearly show and disclose, the method according to claim 27 wherein said defining step

comprises defining said at least two message classes based on at least one of: a priority type of said

communications messages (Williams; abstract, column 2 lines 20-36); an application protocol used

when generating said communications messages; and a session type associated with communications messages.

e) Consider **claim 31, and as applied to claim 27 above,** Williams et al. as modified by Nakatsugawa clearly show and disclose, the method according to claim 27, further comprising: determining a message class of a communications message (Williams; abstract, column 2 lines 20-36); and storing state information generated based on said communications message in a memory portion associated with said determined message class (Williams; abstract, column 2 lines 37-57).

d) Consider **claim 32, and as applied to claim 31 above,** Williams et al. as modified by Nakatsugawa clearly show and disclose, the method according to claim 31 wherein said message class determining step comprises determining said message class based on data found in said communications message (Williams; abstract, column 2 lines 20-36).

e) Consider **claim 33, and as applied to claim 32 above,** Williams et al. as modified by Nakatsugawa clearly show and disclose, the method according to claim 32 further comprising determining whether said state information is to be stored in said memory portion (Williams; column 2 lines 37-57).

f) Consider **claim 34, and as applied to claim 33 above,** Williams et al. as modified by Nakatsugawa clearly show and disclose, the method according to claim 33, wherein said step of determining whether said state information is to be stored comprises retrieving storage priority information from a look-up list comprising storage command information for said message classes (Williams; abstract, column 2 lines 37-57).

g) Consider **claim 35, and as applied to claim 34 above,** Williams et al. as modified by Nakatsugawa clearly show and disclose, the method according to claim 34, wherein said step of determining whether said state information is to be stored comprises: investigating whether similar

state information is already stored in said memory portion (Nakatsugawa; column 2 lines 27-41); and

storing said state information if no similar state information is already stored in said memory portion

(Nakatsugawa; column 2 lines 27-41).

h) Consider **claim 37,** Williams et al. clearly show and disclose, a unit for managing a state

memory adapted for storing state information applicable in a message communication between

communications units in a communications system, comprising: means for defining at least two

message classes of the messages communicated between said communications units (abstract,

column 2 lines 20-36); and means for dividing said state memory into at least two memory portions,

each memory portion being assigned for storing information associated with a specific message class

(abstract, column 2 lines 37-57); and in that said defining means is configured for defining said at

least two message classes based on at least one of: a priority type of said communications messages

(abstract, column 2 lines 20-36); an application protocol used when generating said communications

messages; and a session type associated with communications messages. However, Williams et al.

does not specifically disclose a state memory adapted for storing state information applicable in said

message communication; a state memory managing unit; that said state memory is arranged in a first

communication unit and is allocated for storing state information used in message communication

with a second communications unit; or in that said second communications unit requesting said first

communications unit to allocate state memory space utilized for storing said state information used

in said message communication with said second communications unit.

Nakatsugawa shows and discloses a state information managing method which is able to

manage easily state information of respective communication units, wherein a state memory adapted

for storing state information applicable in said message communication (abstract, column 2 lines 20-

34); a state memory managing unit (column 2 lines 20-34); that said state memory is arranged in a

first communication unit and is allocated for storing state information used in message

communication with a second communications unit (abstract, column 2 lines 20-34); and in that said

second communications unit requesting said first communications unit to allocate state memory

space utilized for storing said state information used in said message communication with said

second communications unit (abstract, column 2 lines 20-34 lines 53-67).

One of ordinary skill in the art at the time the invention was made would have been

motivated to combine the teachings of Nakatsugawa and Williams et al. since both concern

managing messaging in a communication network and as such, both are with in the same

environment.

Therefore, it would have been obvious to one of ordinary skill in the art that the time the

invention was made to incorporate a state memory manager and state memory for storing state

information, as taught by, Nakatsugawa into the system of Williams et al. for the purpose of

reducing communication traffic volume required for state management (Nakatsugawa; column 1

lines 7-14), thereby reducing the amount of resources required for state management.

i) Consider **claim 38,** Williams et al. clearly show and disclose, a communications unit

adapted for message communication with at least one external communications unit in a

communications system, said communications unit comprising: means for defining at least two

message classes of the messages communicated between said communications unit and said at least

one external communications unit (abstract, column 2 lines 20-36); and means for dividing said

memory into at least two memory portions, each memory portion being assigned for storing

information associated with a specific message class (abstract, column 2 lines 37-57); and in that said

defining means is configured for defining said at least two message classes based on at least one of: a

priority type of said communications messages (abstract, column2 lines 20-36); an application

protocol used when generating said communications messages; and a session type associated with

communications messages. However, Williams et al. does not specifically disclose a state memory

adapted for storing state information applicable in said message communication; a state memory

managing unit; that said state memory is allocated for storing state information used in message

communication with one of the at least one external communications unit; or that said one external

communications unit requesting said state memory managing unit to allocate state memory space

utilized for storing said state information used in said message communication with said one

external communications unit.

Nakatsugawa shows and discloses a state information managing method which is able to

manage easily state information of respective communication units, wherein a state memory adapted

for storing state information applicable in said message communication (abstract, column 2 lines 20-

34); a state memory managing unit (column 2 lines 20-34); that said state memory is allocated for

storing state information used in message communication with one of the at least one external

communications unit (abstract, column 2 lines 20-34); or that said one external communications unit

requesting said state memory managing unit to allocate state memory space utilized for storing said

state information used in said message communication with said one external communications unit

(abstract, column 2 lines 20-34 lines 53-67).

One of ordinary skill in the art at the time the invention was made would have been

motivated to combine the teachings of Nakatsugawa and Williams et al. since both concern

managing messaging in a communication network and as such, both are with in the same

environment.

Therefore, it would have been obvious to one of ordinary skill in the art that the time the

invention was made to incorporate a state memory manager and state memory for storing state

information, as taught by, Nakatsugawa into the system of Williams et al. for the purpose of

reducing communication traffic volume required for state management (Nakatsugawa; column 1

lines 7-14), thereby reducing the amount of resources required for state management.

j) Consider **claim 39,** and **as applied to claim 37 above,** Williams et al. as modified by

Nakatsugawa clearly show and disclose, the unit according to claim 37, wherein said dividing means

is configured for dividing said state memory into at least two memory portions based on said

message class definition from said defining means (Williams; abstract, column 2 lines 37-57).

k) Consider **claim 40,** and **as applied to claim 37 above,** Williams et al. as modified by

Nakatsugawa clearly show and disclose, the unit according to claim 37, wherein said managing unit

and said state memory are arranged in the first communication unit and said state memory is

allocated for storing state information used in message communication with the second

communications unit (Nakatsugawa; abstract, column 2 lines 20-34).

l) Consider **claim 44,** and **as applied to claim 37 above,** Williams et al. as modified by

Nakatsugawa clearly show and disclose, the unit according to claim 37, wherein said defining means

is configured for defining said at least two message classes based on at least one of: a priority type of

said communications messages (Williams; abstract, column 2 lines 20-36); an application protocol

used when generating said communications messages; and a session type associated with

communications messages.

m) Consider **claim 47,** and **as applied to claim 37 above,** Williams et al. as modified by

Nakatsugawa clearly show and disclose, the unit according to claim 37, characterized by: means for

determining a message class of a communications message (Williams; abstract, column 2 lines 20-

36); and means for storing state information generated based on said communications message in a

memory portion associated with said determined message class (Williams; abstract, column 2 lines 37-57).

n) Consider **claim 48,** and **as applied to claim 47 above,** Williams et al. as modified by Nakatsugawa clearly show and disclose, the unit according to claim 47, wherein said determining means is configured for determining said message class based on data found in said communications message (Williams; abstract, column 2 lines 20-36).

o) Consider **claim 49,** and **as applied to claim 47 above,** Williams et al. as modified by Nakatsugawa clearly show and disclose, the unit according to claim 47, further comprising means for determining whether said state information is to be stored in said memory portion (Williams; abstract, column 2 lines 37-57).

p) Consider **claim 50,** and **as applied to claim 49 above,** Williams et al. as modified by Nakatsugawa clearly show and disclose, the unit according to claim 49, wherein said determining means is configured for retrieving storage priority information from an associated look-up list comprising storage command information for said message classes and for generating a storing command based on said storage priority information, said storing means being responsive to said storing command (Williams; abstract, column 2 lines 36-57).

q) Consider **claim 51,** and **as applied to claim 49 above,** Williams et al. as modified by Nakatsugawa clearly show and disclose, the unit according to claim 49, wherein said determining means is configured for investigating whether similar state information is already stored in said memory portion (Nakatsugawa; abstract, column2 lines 27-41) and for generating a storing command if no similar state information is already stored in said memory portion, said storing means being responsive to said storing command (Nakatsugawa; abstract, column2 lines 27-41).

9.   **Claims 29, 30, 45, and 46** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Williams et al. (US Patent # 6,144,669)** in view of **Nakatsugawa (US Patent # US 6,243,830 B1)** in further view of **Sakaguchi et al. (US Patent # US 2003/0212855 A1).**

a) Consider **claim 29,** and **as applied to claim 27 above,** Williams et al. as modified by Nakatsugawa clearly show and disclose, the method according to claim 27. However, Williams et al. as modified by Nakatsugawa does not specifically disclose that said dividing step comprises allocating an equal memory size to said at least two memory portions.

Sakaguchi et al. show and disclose a system for controlling divided areas of a cache memory, wherein said dividing step comprises allocating an equal memory size to said at least two memory portions (figure 3, figure 5, paragraph [0028]).

One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings of Sakaguchi et al. and Williams et al. as modified by Nakatsugawa since both concern storing information and as such, both are with in the same environment.

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate allocating memory sizes (equal or unequal allocations) to a number of memory portions, as taught by, Sakaguchi et al. into the system of Williams et al. as modified by Nakatsugawa for the purpose of enabling data to be stored in each of those areas automatically according to its state (Sakaguchi; paragraph [0006]), thereby preventing data to be accessed frequently from being swapped out by data not to be accessed so often.

b) Consider **claim 30,** and **as applied to claim 27 above,** Williams et al. as modified by Nakatsugawa clearly show and disclose, the method according to claim 27. However, Williams et al. as modified by Nakatsugawa does not specifically disclose that said dividing step comprises

allocating a first memory size to a first memory portion and a second different memory size to a second memory portion based on a first message class associated with said first memory portion and a second message class associated with said second memory portion.

Sakaguchi et al. show and disclose a system for controlling divided areas of a cache memory, wherein dividing step comprises allocating a first memory size to a first memory portion and a second different memory size to a second memory portion based on a first message class associated with said first memory portion and a second message class associated with said second memory portion (figure 3, figure 5, paragraph [0028]).

One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings of Sakaguchi et al. and Williams et al. as modified by Nakatsugawa since both concern storing information and as such, both are with in the same environment.

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate allocating memory sizes (equal or unequal allocations) to a number of memory portions, as taught by, Sakaguchi et al. into the system of Williams et al. as modified by Nakatsugawa for the purpose of enabling data to be stored in each of those areas automatically according to its state (Sakaguchi; paragraph [0006]), thereby preventing data to be accessed frequently from being swapped out by data not to be accessed so often.

c) Consider **claim 45,** and **as applied to claim 37 above,** Williams et al. as modified by Nakatsugawa clearly show and disclose, the unit according to claim 37. However, Williams et al. as modified by Nakatsugawa does not specifically disclose that said dividing means is configured for allocating an equal memory size to said at least two memory portions.

Sakaguchi et al. show and disclose a system for controlling divided areas of a cache memory, wherein that said dividing means is configured for allocating an equal memory size to said at least two memory portions (figure 3, figure 5, paragraph [0028]).

One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings of Sakaguchi et al. and Williams et al. as modified by Nakatsugawa since both concern storing information and as such, both are with in the same environment.

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate allocating memory sizes (equal or unequal allocations) to a number of memory portions, as taught by, Sakaguchi et al. into the system of Williams et al. as modified by Nakatsugawa for the purpose of enabling data to be stored in each of those areas automatically according to its state (Sakaguchi; paragraph [0006]), thereby preventing data to be accessed frequently from being swapped out by data not to be accessed so often.

d) Consider **claim 46,** and **as applied to claim 37 above,** Williams et al. as modified by Nakatsugawa clearly show and disclose, the unit according to claim 37. However, Williams et al. as modified by Nakatsugawa does not specifically disclose that said dividing means is configured for allocating a first memory size to a first memory portion and a second different memory size to a second memory portion.

Sakaguchi et al. show and disclose a system for controlling divided areas of a cache memory, wherein said dividing means is configured for allocating a first memory size to a first memory portion and a second different memory size to a second memory portion (figure 3, figure 5, paragraph [0028]).

One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings of Sakaguchi et al. and Williams et al. as modified by Nakatsugawa since both concern storing information and as such, both are with in the same environment.

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate allocating memory sizes (equal or unequal allocations) to a number of memory portions, as taught by, Sakaguchi et al. into the system of Williams et al. as modified by Nakatsugawa for the purpose of enabling data to be stored in each of those areas automatically according to its state (Sakaguchi; paragraph [0006]), thereby preventing data to be accessed frequently from being swapped out by data not to be accessed so often.

10.   **Claims 36, 42-43, and 52** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Williams et al. (US Patent # 6,144,669)** in view of **Nakatsugawa (US Patent # US 6,243,830 B1)** in further view of **Leung et al. (US Patent Publication # US 2002/0132613 A1).**

a) Consider **claim 36,** and **as applied to claim 35 above,** of Williams et al. as modified by Nakatsugawa clearly show and disclose, the method according to claim 35. However, Williams et al. as modified by Nakatsugawa does not specifically disclose that said step of determining whether said state information is to be stored comprises: compressing said communications message; calculating a compression factor for said communications message; and determining whether said state information is to be stored in said memory portion based on said compression factor.

Leung et al. show and disclose message compression and more particularly to a method and system for providing a context, which is a dictionary and/or code related to the dictionary, for message compression, wherein said step of determining whether said state information is to be

stored comprises: compressing said communications message (paragraph [0031], [0033], [0035]); calculating a compression factor for said communications message (paragraph [0037], [0038]); and determining whether said state information is to be stored in said memory portion based on said compression factor (paragraph [0033]).

One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings of Leung et al. and Williams et al. as modified by Nakatsugawa since both concern managing messaging in a communication network and as such, both are with in the same environment.

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate message compression and storage based on compression, as taught by, Leung et al. into the system of Williams et al. as modified by Nakatsugawa for the purpose of storing information from one communications session to another (Leung; paragraph [0011], [0033]), thereby decreasing the amount of information that needs to be exchanged.

b) Consider **claim 42,** and **as applied to claim 37 above,** Williams et al. as modified by Nakatsugawa clearly show and disclose, the unit according to claim 37. However, Williams et al. as modified by Nakatsugawa does not specifically disclose that said state information is used during compression and/or decompression of said communications messages.

Leung et al. show and disclose message compression and more particularly to a method and system for providing a context, which is a dictionary and/or code related to the dictionary, for message compression, wherein that said state information is used during compression and/or decompression of said communications messages (paragraph [0033]).

One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings of Leung et al. and Williams et al. as modified by Nakatsugawa

since both concern managing messaging in a communication network and as such, both are with in the same environment.

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate state information is used during compression/decompression, as taught by, Leung et al. into the system of Williams et al. as modified by Nakatsugawa for the purpose of storing information from one communications session to another (Leung; paragraph [0033]), thereby decreasing the amount of information that needs to be exchanged.

e) Consider **claim 43,** and **as applied to claim 37 above,** Williams et al. as modified by Nakatsugawa clearly show and disclose, the unit according to claim 37. However, Williams et al. as modified by Nakatsugawa does not specifically disclose a compressor; and a decompressor, wherein said state information is used by at least one of said compressor and said decompressor.

Leung et al. show and disclose message compression and more particularly to a method and system for providing a context, which is a dictionary and/or code related to the dictionary, for message compression, wherein a compressor; and a decompressor, wherein said state information is used by at least one of said compressor and said decompressor.

One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings of Leung et al. and Williams et al. as modified by Nakatsugawa since both concern managing messaging in a communication network and as such, both are with in the same environment.

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate a compressor/decompressor and state information being used during compression/decompression, as taught by, Leung et al. into the system of Williams et al. as modified by Nakatsugawa for the purpose of storing information from one communications session

to another (Leung; paragraph [0033]), thereby decreasing the amount of information that needs to be exchanged.

    d) Consider **claim 52,** and **as applied to claim 49 above,** Williams et al. as modified by Nakatsugawa clearly show and disclose, the unit according to claim 49. However, Williams et al. as modified by Nakatsugawa does not specifically disclose that said determining means is configured for receiving a compression factor obtained during compressing said communications message and for generating a storing command based on said compression factor, said storing means being responsive to said storing command.

    Leung et al. show and disclose message compression and more particularly to a method and system for providing a context, which is a dictionary and/or code related to the dictionary, for message compression, wherein said determining means is configured for receiving a compression factor obtained during compressing said communications message (paragraph [0031], [0033], [0035], [0037], [0038]) and for generating a storing command based on said compression factor, said storing means being responsive to said storing command (paragraph [0033]).

    One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings of Leung et al. and Williams et al. as modified by Nakatsugawa since both concern managing messaging in a communication network and as such, both are with in the same environment.

    Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate message compression and storage based on compression, as taught by, Leung et al. into the system of Williams et al. as modified by Nakatsugawa for the purpose of storing information from one communications session to another (Leung; paragraph [0011], [0033]), thereby decreasing the amount of information that needs to be exchanged.

Response to Arguments

11.   Applicant's arguments filed 12OCT2009 have been fully considered but they are not

persuasive.

Applicant argues "Claim 27 stands rejected under 35 U.S.C. § 101 because the recited

method is not tied to a particular machine or does not transform underlying subject matter (such as

an article or material) to a different state or thing. Applicant respectfully traverses this rejection

because the claimed state memory (underlying subject matter) is transformed during the dividing

step into at least two memory portions where each memory portion is assigned to store state

information associated with a specific message class."

The Examiner respectfully disagrees; Dividing the claimed state memory (underlying subject

matter) into at least two memory portions where each memory portion is assigned to store state

information associated with a specific message class clearly does not transform the underlying

subject matter (article or material) into a different state or thing. Dividing the memory constitutes a

logical transformation (one can mentally divide a memory into two separate portions), not a physical

transformation, and clearly does not transform the underlying subject matter. While dividing the

memory may partition the memory into two portions it is still the same memory, simply limiting

what data goes in what portion of the memory does not transform the memory (underlying subject

matter). Furthermore, the division of the state memory is not tied to any particular machine and

clearly is broad enough that the claim could be completely performed mentally, verbally or without a

machine. If Applicant should have any further questions regarding this objection the Applicant is

encouraged to contact the Examiner and schedule an interview for further explanation.

Applicant argues that "Claims 37 and 38 stand rejected under 35 U.S.C. § 101 because the

Applicant attempted to claim non-statutory subject matter (i.e. software) and does not claim a

proper computer readable medium. In rejecting claims 37 and 38, the Examiner highlighted the

following terms "unit for managing", "communications unit", "state memory managing unit",

"means for defining", and "means for dividing" (see pages 3-4 in the Office Action).Thus, the

Examiner appears to contend that claims which are drafted in accordance with §112, ¶6 are

considered unpatentable software. Applicant respectfully traverses this rejection. In particular,

Applicant submits that it would be incongruous to the patent statute, as a whole, to state that claims

can be drafted using the statutorily-authorized form under §112, ¶6 do not qualify as statutory

subject matter under §101."

      The Examiner respectfully disagrees; Applicant neglects to take into account the fact that the

portion of Applicant's specification cited in the previous Office Action clearly states that **the units**

132, 134, 136 and 138 **of the memory manager** 120 may be provided as **software**, hardware or a

combination thereof (see previous Office Action for further details)(Specification; page 20 lines 17-

21). Therefore, all "units" and "means for" are rendered non-statutory because Applicant chose to

define the units/structure (defining the "means for") as being provided as software and can be

reasonably interpreted as such. Therefore, even if the claims are drafted using "statutorily-authorized

form" as Applicant argues, it would not be incongruous to the patent statute, as a whole, to state

that claims do not qualify as statutory subject matter since Applicant has clearly defined the

units/structure as software and therefore rendered them non-statutory. If Applicant should have any

further questions regarding this objection the Applicant is encouraged to contact the Examiner and

schedule an interview for further explanation.

      Applicant argues that "…Nakatsugawa fails to disclose or suggest the claimed feature where

a first communication unit has the state memory for storing state information used in message

communication with a second communications unit and where the second communications unit

requests the first communication unit to allocate state memory space utilized for storing said state information used in the message communication with the second communications unit."

The Examiner respectfully disagrees; Nakatsugawa clearly discloses a first communication unit has the state memory for storing state information used in message communication with a second communications unit (abstract, column 2 lines 20-34) and where the second communications unit requests the first communication unit to allocate state memory space utilized for storing said state information used in the message communication with the second communications unit (abstract, column 2 lines 20-34, lines 53-67). Nakatsugawa clearly discloses a first communication unit (collecting communication unit) has the state memory (memory portion) for storing state information (state information) used in message communication (mutual communication) with a second communications unit (report communication unit). Nakatsugawa clearly discloses the collecting communication unit collects state information, which concerns the communication of messages, from the report units. Therefore, Nakatsugawa clearly discloses a first communication unit has the state memory for storing state information used in message communication with a second communications unit. Nakatsugawa also clearly discloses the second communications unit (report communication unit) requests the first communication unit (collecting communication unit) to allocate state memory space (memory portion) utilized for storing said state information (state information) used in the message communication (mutual communication) with the second communications unit (report communication unit). Nakatsugawa clearly discloses that when the state information in the report communication unit changes the changed state information and the report communication unit address is added to the recovery command. After the recovery command has been transmitted to all the report communication units, the collecting communication unit receives the recovery command to which the changed state information and the addresses of

respective report communication units are added collectively. Nakatsugawa clearly discloses that the

report communication unit (second communications unit) has a memory portion allocated to store

state information in the collecting communication unit (first communications unit) and that state

information and addressed of the report communication units are added (at the request of the report

communication unit) to the collecting communication unit (first communications unit). Therefore,

the second communications unit requests the first communication unit to allocate state memory

space utilized for storing said state information used in the message communication with the second

communications unit.

      The Examiner has cited particular columns and line numbers in the references as applied to

the claims above for the convenience of the Applicant. Although the specified citations are

representative of the teachings in the art and are applied to the specific limitations within the

individual claim, other passages and figures may apply as well. It is respectfully requested from the

Applicant, in preparing the responses, to fully consider each of the cited references in entirety as

potentially teaching all or part of the claimed invention, as well as the context of the passage

disclosed by the Examiner.

Conclusion

12.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

      A shortened statutory period for reply to this final action is set to expire THREE MONTHS

from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the

mailing date of this final action and the advisory action is not mailed until after the end of the

THREE-MONTH shortened statutory period, then the shortened statutory period will expire on

the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

calculated from the mailing date of the advisory action. In no event, however, will the statutory

period for reply expire later than SIX MONTHS from the mailing date of this final action.

13.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

- ➢ US 2006/0136593 A1
- ➢ US 2004/0162889 A1
- ➢ US 2002/0103902 A1
- ➢ US 7,447,802 B2
- ➢ US 7,353,266 B2
- ➢ 5,671,436

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to DANIEL C. MURRAY whose telephone number is 571-270-1773. The

examiner can normally be reached on Monday - Friday 0800-1700 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Tonia Dollinger can be reached on (571)-272-4170. The fax phone number for the organization

where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR system,

see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system,

contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like

assistance from a USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. C. M./
Examiner, Art Unit 2443

/Tonia LM Dollinger/

Supervisory Patent Examiner, Art Unit 2443